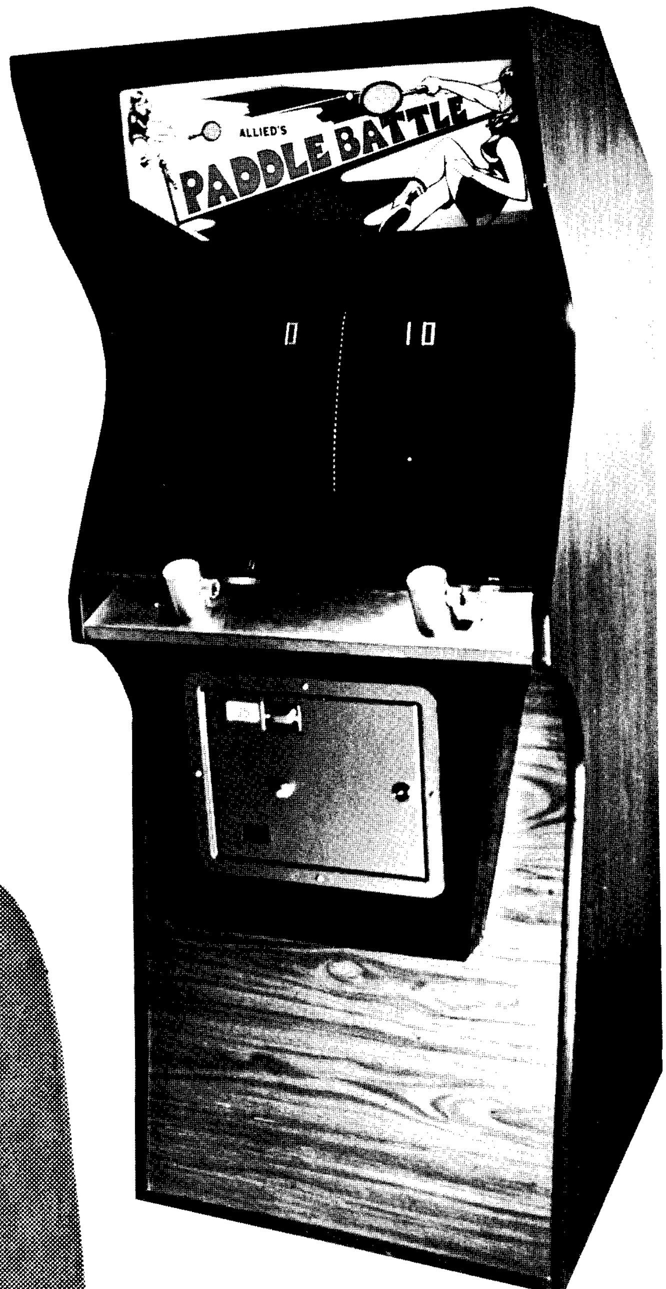
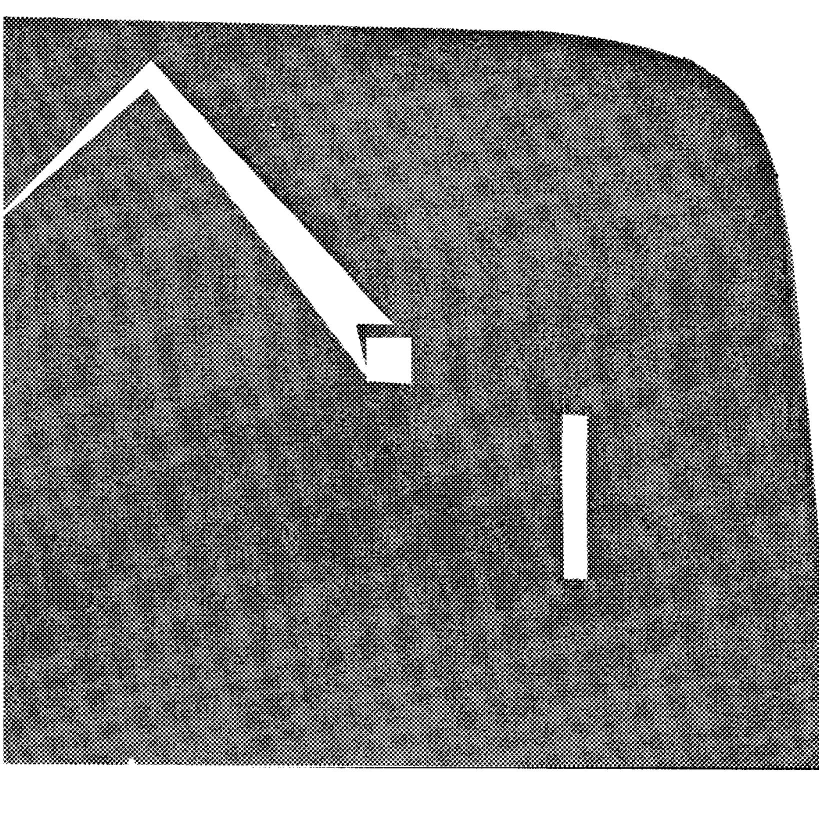
Allied's

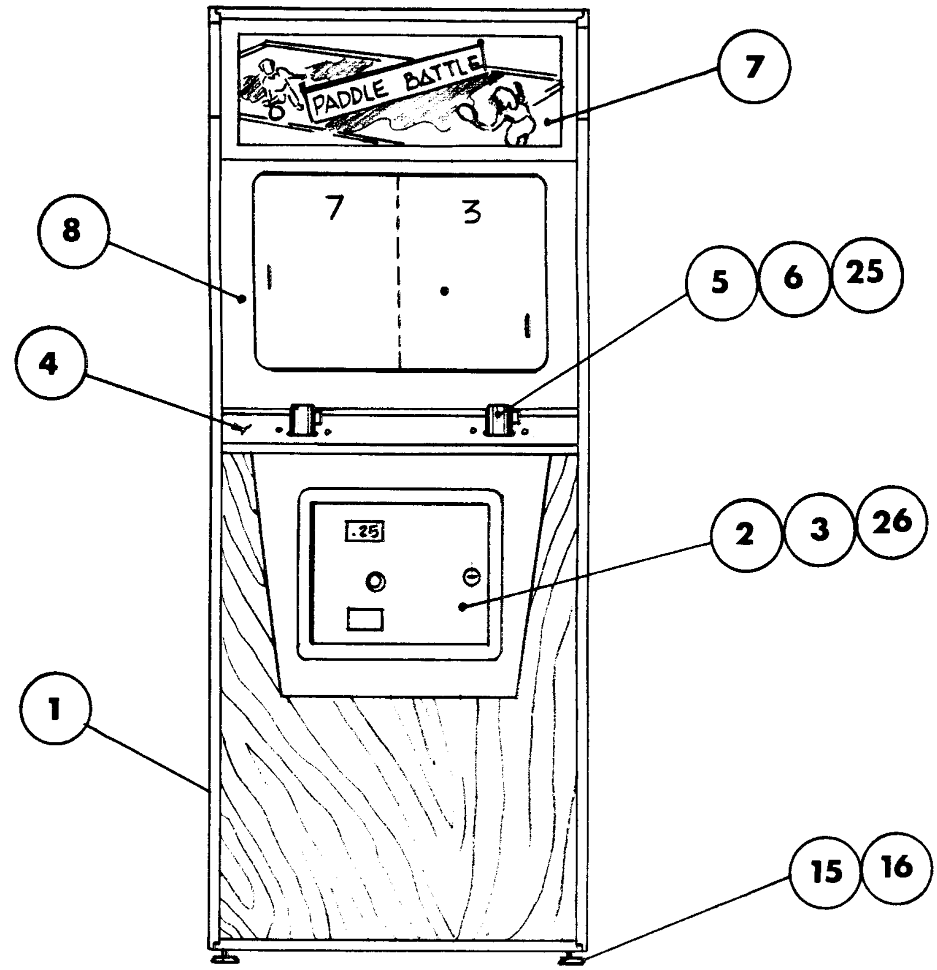
PADDLE BATTLE

Parts & Wiring Catalog

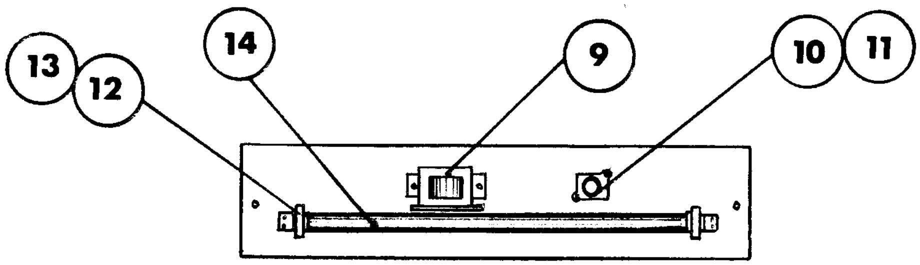




ALLIED LEISURE INDUSTRIES INC.
245 WEST 74TH PLACE
HIALEAH, FLORIDA 33010



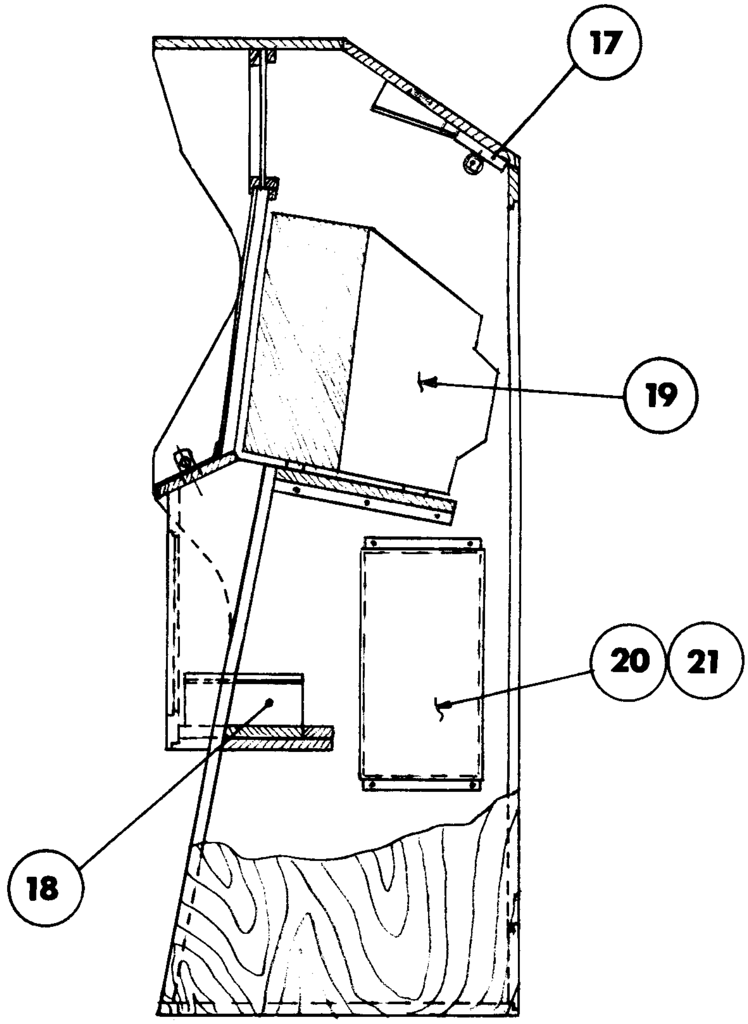
FRONT VIEW - CABINET



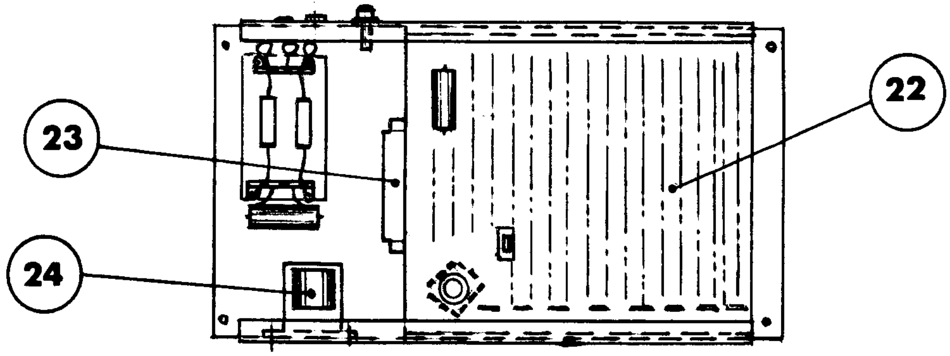
TOP LAMP ASS'Y

PADDLE BATTLE

ITEM	PART NO.	DESCRIPTION
1	244-1-1	Paddle Battle Cabinet for Hitachi TV
	244-1-6	Paddle Battle Cabinet for Sylv & GE
2	240-1-500	Coin Door Assy Single Acceptor
3	240-1-504	Coin Door Frame Assembly
4	244-3-4	Deck Control Cover
5	244-3-5	"Pot" Holder
6	244-9-8	5M ohm linear potentiometer
7	244-6-1	Top Glass - Paddle Battle
8	244-6-2	Smoked Grey glass (screen)
9	240-9-81	Transformer (ballast coil)
10	240-9-82	Starter Socket
11	240-9-83	Fluorescent Lamp starter
12	240-9-84	Fluorescent Lamp socket
13	240-3-45	Sky Lamp Bracket
14	242-9-53	Fluorescent Lamp
15	240-3-46	Leg Leveler Tap Plate
16	240-8-9	Leg Leveler
17	244-1-2	Top Lamp Ass'y
18	240-1-507	Cash Box Weldm't
19	244-9-1	Portable TV
20	244-1-5	Chassis Ass'y
21	244-3-11	Cover P.C.B. Chassis
22	244-9-2	P.C.B. #039 Video Control
23	244-9-12	22 Pin PCB Edge Connector
24	244-9-13	Transformer
25	244-2-1	Button control (knob)
26	244-71-2	Slam Switch

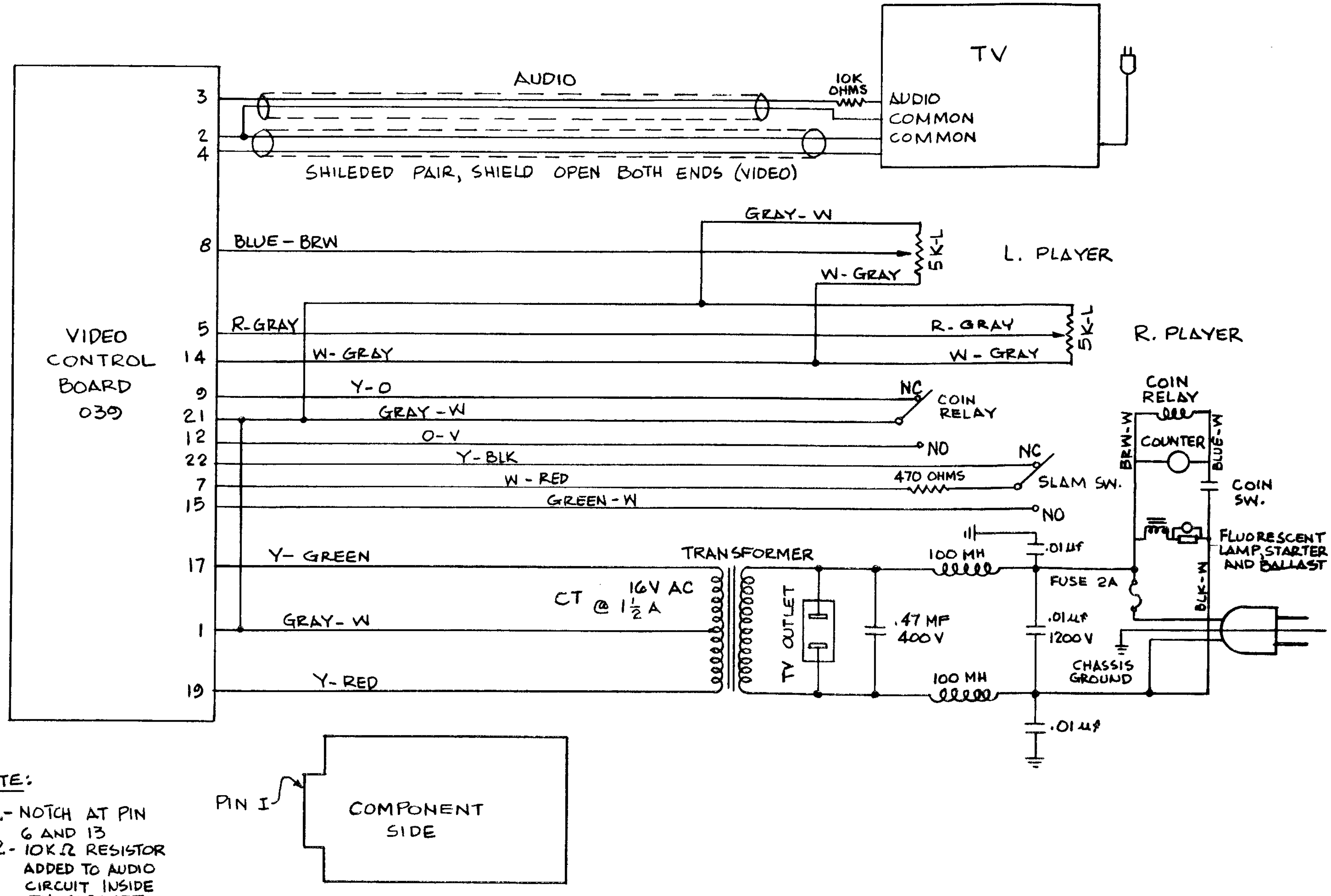


SIDE VIEW - CABINET



P.C.B. CHASSIS ASS'Y

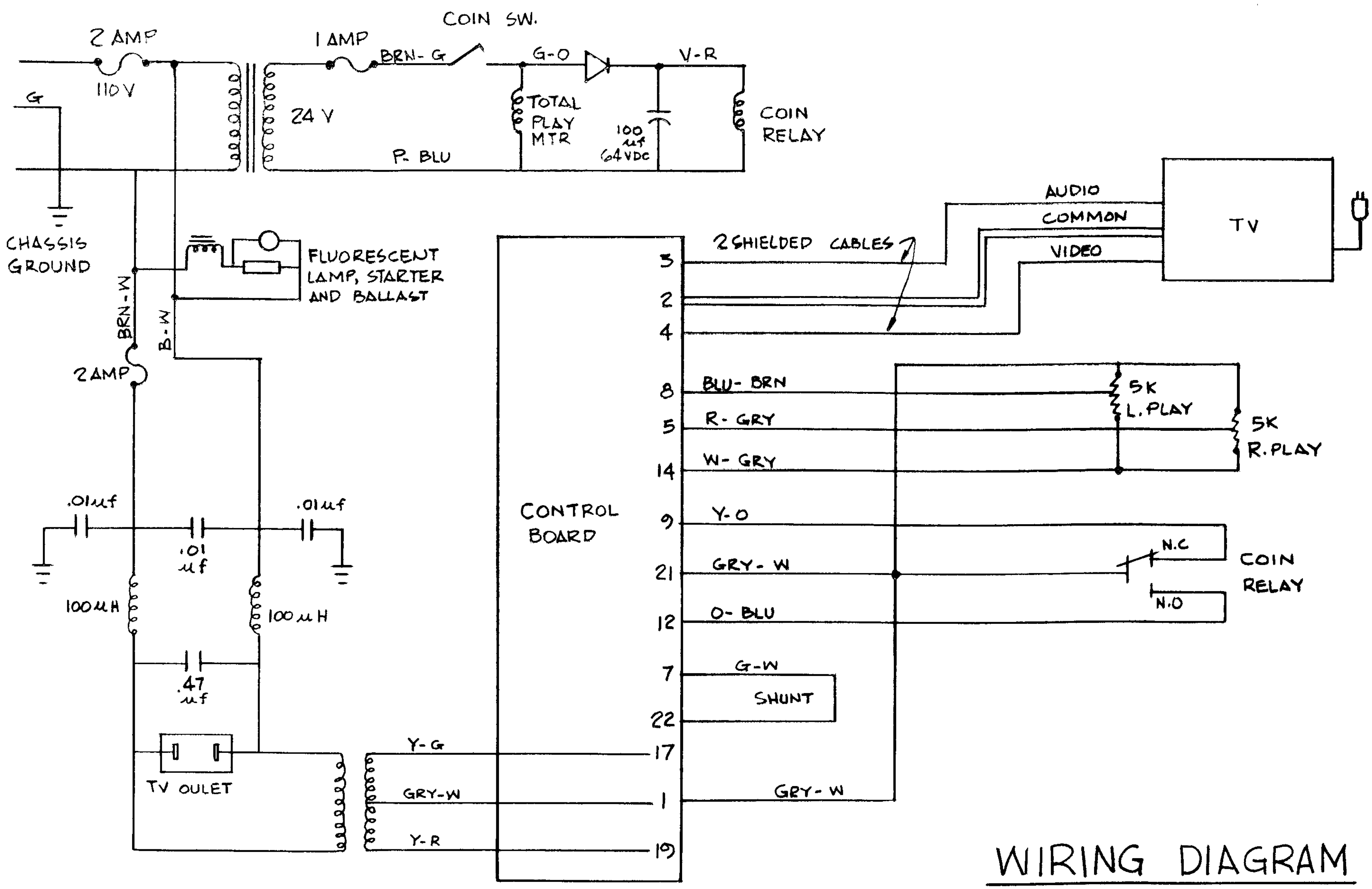
WIRING DIAGRAM



NOTE:

1.- NOTCH AT PIN 6 AND 13

2.- 10KΩ RESISTOR ADDED TO AUDIO CIRCUIT INSIDE TV. CABINET.



WIRING DIAGRAM

S/N'S 907 UP

TROUBLESHOOTING GUIDE

Symptom	Problem
1. No video or sound	Coin switch stuck down PC board edge connector loose Television input or power line disconnected Television or control PC board bad
2 Sound but no video	Open video line (untaped shielded cable) Television out of adjustment (see set up procedure) Television or control board bad
3. Video but no sound	Same as No. 2 except audio shielded line open (taped shielded cable) (See set up procedure for access to television controls)
4. Picture distorted or out of center	See set up procedure
5. Right or left paddle moves irratically	Potentiometer dirty or worn out
6 Game shuts off before 11 or 15 setting	Slam switch not enough tension on normally closed contacts. Capacitor lead on chassis filter assembly open. Lead on slam switch wires open.

Note: Remove front panel for access to Television controls

Maintenance and Adjustment procedure:

1. Television connections and controls

    1. Plug power cord into control chassis and connect the shielded input wires.

    2. Activate coin switch and adjust game per the following: (Note: Remove front panel for access to television controls)

        A. Volume - adjust to desired level, approximately 3/4 full for normal location.
        B. Brightness - turn from bright until background light disappears.
        C. Contrast - adjust to maximum without distorting numbers on screen.

The following are preset at Allied Leisure

        D. Vertical size adjust until net clears top and bottom by 1/4 to 1/2 inch.
        E. Vertical linearity adjust for equal spacing of dot segments.
        F. Horizontal position - adjust to center and back off until picture holds when television is cycled off and on.

11. Control Chassis

    1. Paddle adjustment-turn front panel knobs to full down position. Adjust trimmers (located on top of control PC board) to move paddles to bottom of screen. Back off until full paddle length is in view.

    2. 11-15 adjustment - set switch on control PC board as desired.

    3. Replacing video board - insert board, connector end first with component side showing. Connect the two 3-pin plugs matching wire colors. 22-pin PC board edge connector is keyed with pin 1 on the right side as viewed in game cabinet.

111. Front Panel

    1. Potentiometer front glass replacement - open cash door and remove the two wing nuts holding front panel in place.

        2. Remove and replace potentiometers as required.

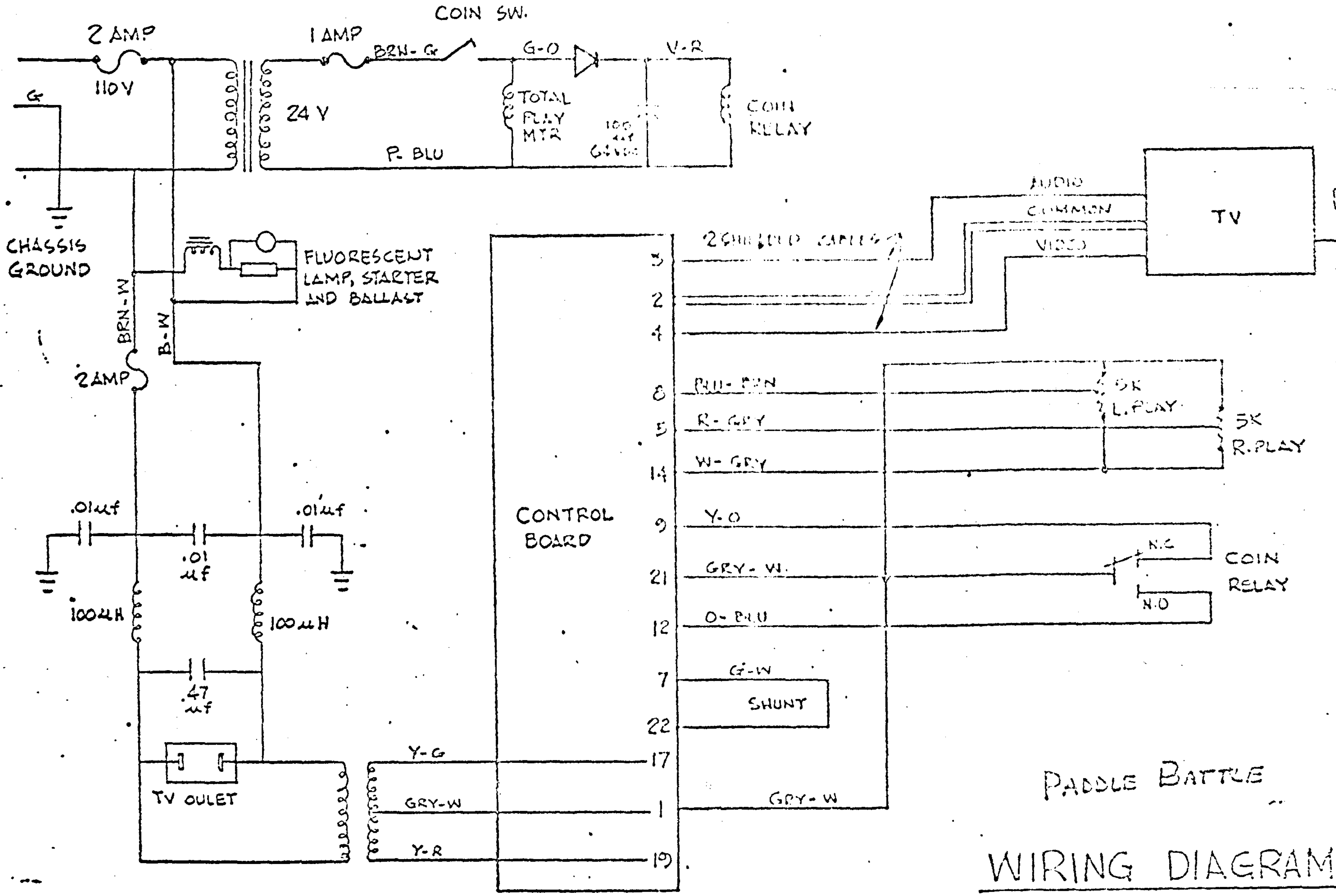
        3. Touch tape to bottom of front glass and pull out for removal.

NOTE: TO AVOID DAMAGE TO TELEVISION, DISCONNECT 3-WIRE CONNECTOR (LOCATED ON BOTTOM OF TELEVISION) BEFORE REMOVING TELEVISION FOR SERVICING.

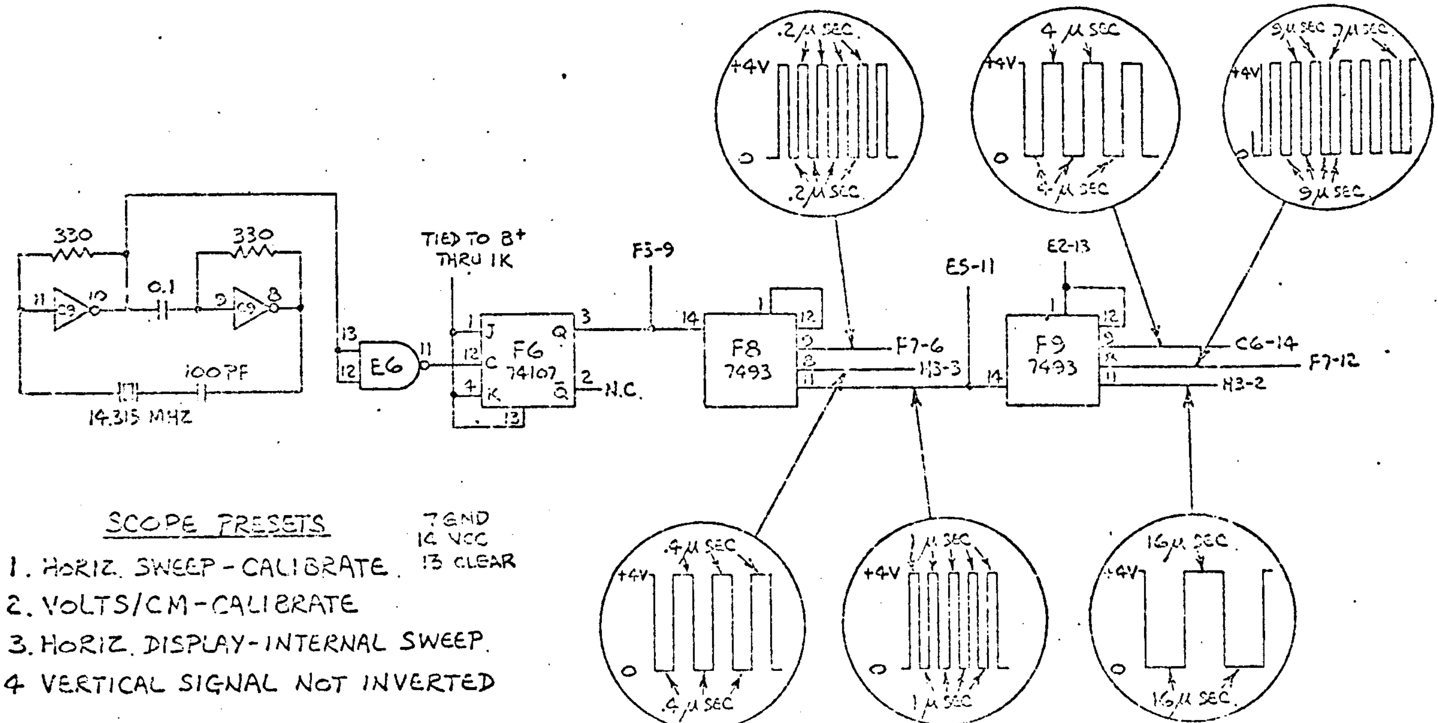
Paddle Battle

Wiring Diagram

S/N's 907 UP



REVISIONS						
REV. LETTER	ITEM NO.	ECN NO.	DESCRIPTION	DISPOSITION OF EXISTING PARTS		CHK'G APP'D
				RE-WORK	SCRAP	



SCOPE PRESETS

1. HORIZ. SWEEP - CALIBRATE
2. VOLTS/CM - CALIBRATE
3. HORIZ. DISPLAY - INTERNAL SWEEP
4 VERTICAL SIGNAL NOT INVERTED

QTY PER ASSY	DWG NO.	NOMENCLATURE	MATERIAL OR COMM'L PART NO.	STOCK SIZE	FINISH	PROCESS	HEAT TREAT

NEXT ASSEMBLY

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ± 1/32
DECIMALS ± .03
DECIMALS ± .010
HOLES ± .002 .000
ANGLES ± 1/2°

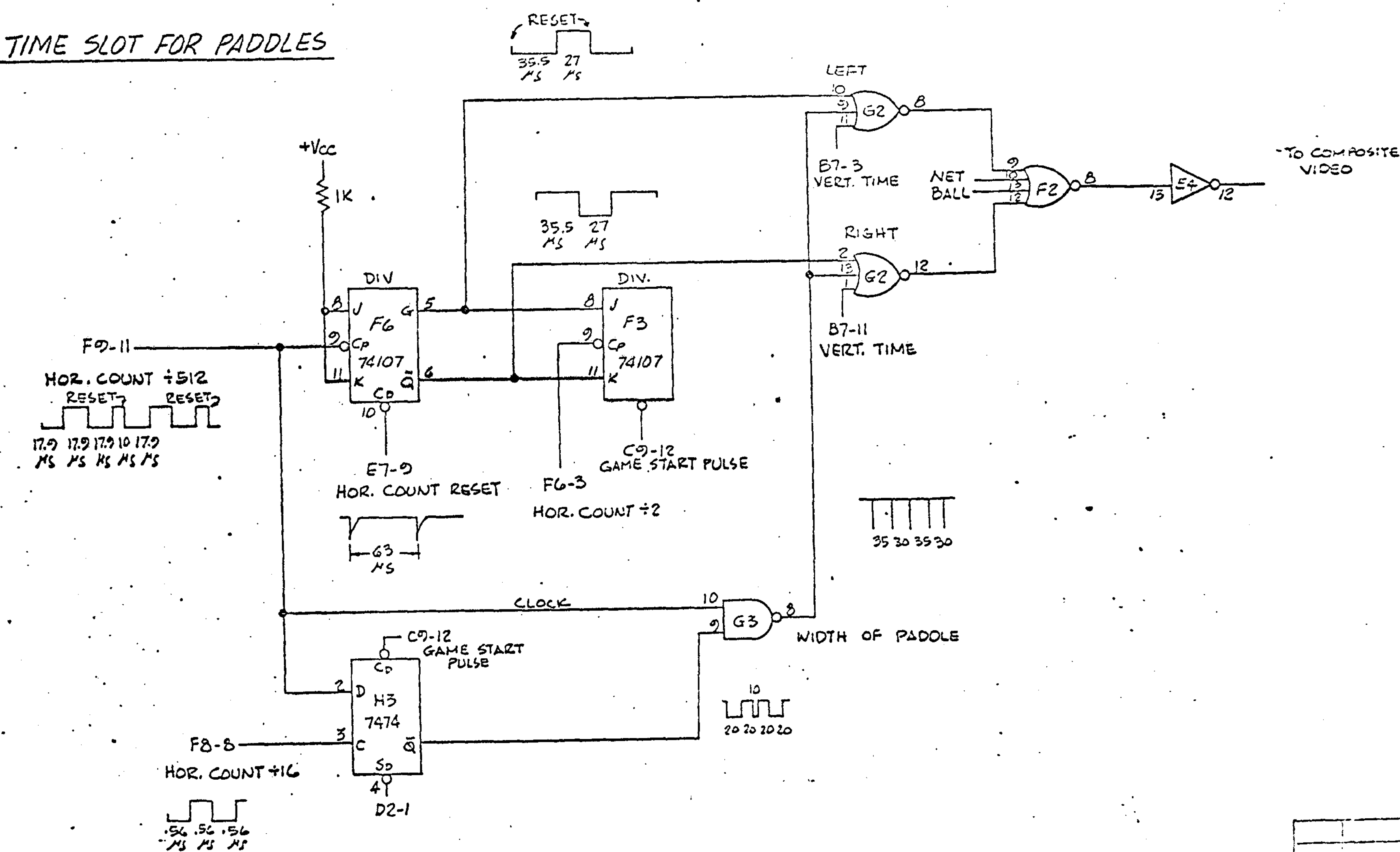
ALLIED LEISURE INDUSTRIES INC.
1780 W. 4th AVENUE HIALEAH, FLORIDA 33010

TITLE: MASTER FREQUENCY GENERATOR

DWN	APP'D.	DATE	SCALE	DWG NO.	REV
A. CHU	[illegible]	5/15/73	~	FN 244-9-15	

1

HORIZONTAL TIME SLOT FOR PADDLES



-PADDLE BATTLE-

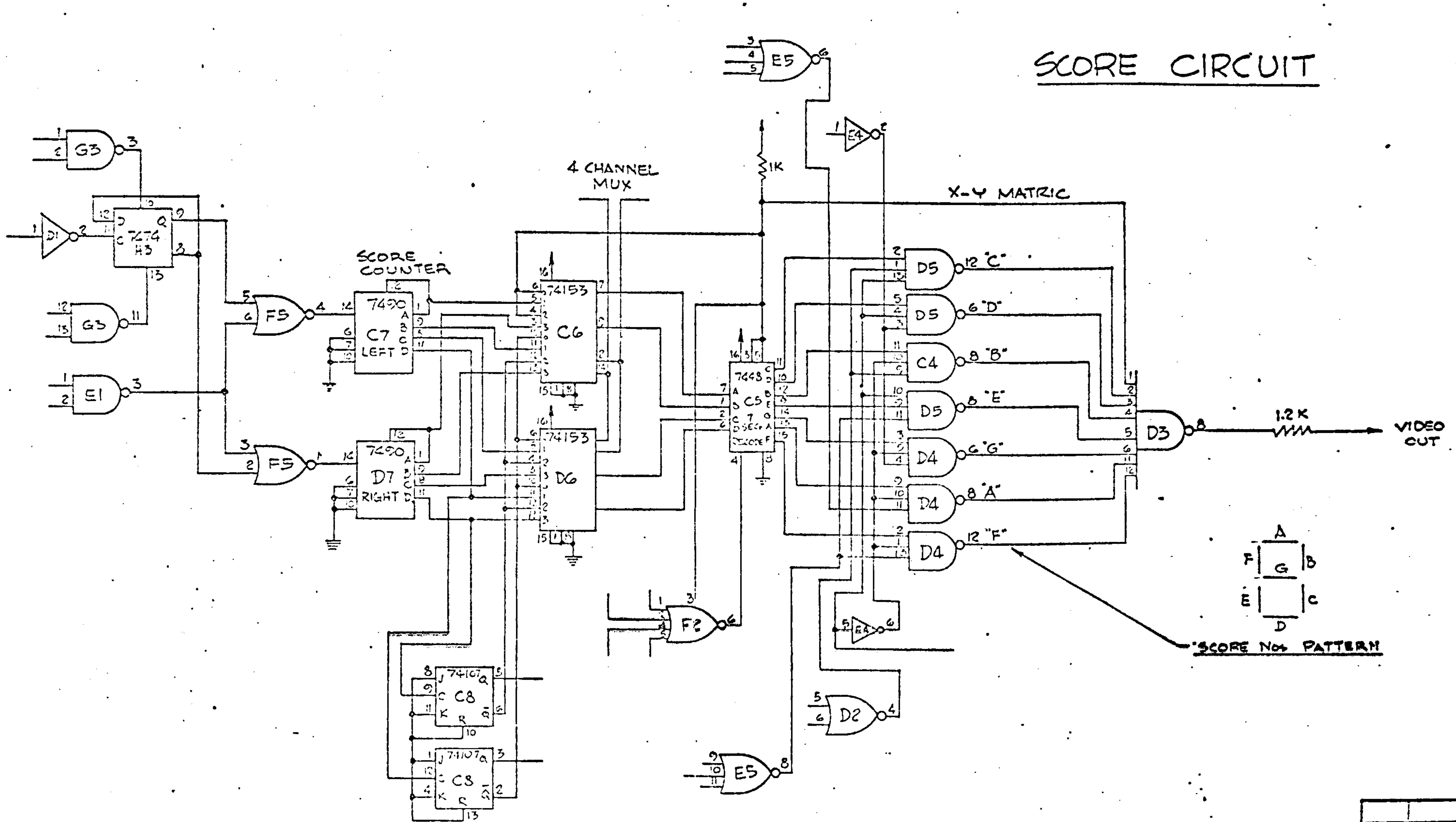
ALLIED LEISURE INDUSTRIES INC.
1700 W. 4TH AVENUE HIALEAH, FLORIDA 33010

REVISION LETTER	REVISION	BY
D		
C		
B		
A		

TOLERANCES UNLESS OTHERWISE SPECIFIED		
FRACTIONS	±	1/64
DECIMALS	±	.01
DECIMALS	±	.005
HOLES	±	.002
ANGLES	±	½°

NAME: HORIZONTAL TIME SLOT FOR PADDLE
MAT'LS | HEAT TREAT. | FINISH
DWN. G.T. | APP'D. | DATE 7-24-72 | SCALE — | PART NO.

SCORE CIRCUIT



—PADDLE BATTLE—

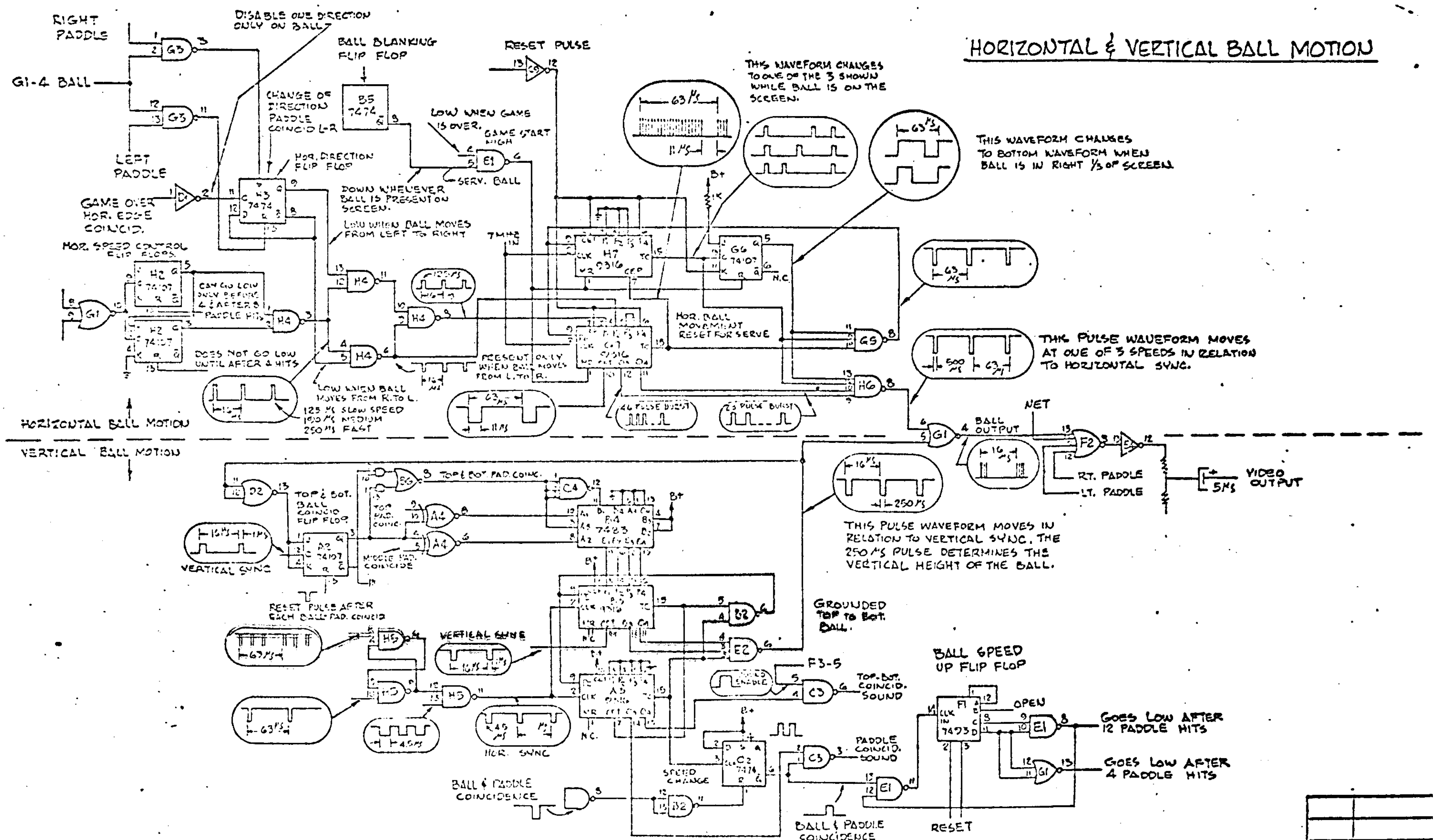
D		
C		
B		
A		
REVISION LETTER	REVISION	BY

TOLERANCES		
UNLESS OTHERWISE SPECIFIED		
FRACTIONS	±	1/64
DECIMALS	±	.01
DECIMALS	±	.005
HOLES	±	.002
ANGLES	±	½°

ALLIED LEISURE INDUSTRIES INC.
1780 W. 4TH AVENUE HIALEAH, FLORIDA 33010

QTY.	ASSEM. C				
NAME	SCORE CIRCUIT-				
MAT'LS		HEAT TREAT.		FINISH	
DWN. GT	APP D.	DATE 7-26-73	SCALE —	PART NO	

HORIZONTAL & VERTICAL BALL MOTION



— PADDLE BATTLE

QTY.	ASSEM. ON	

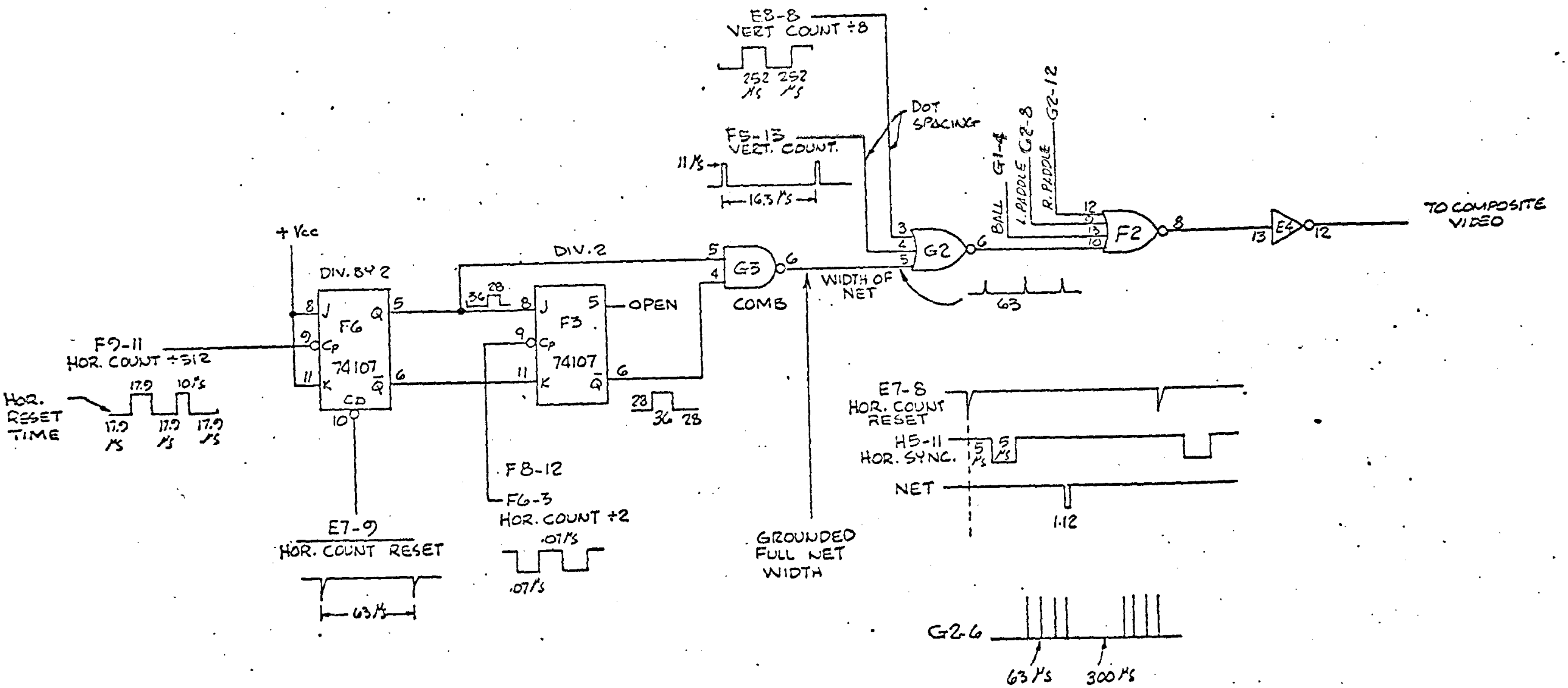
REVISION LETTER	REVISION	BY
D		
C		
B		
A		

TOLERANCES		
UNLESS OTHERWISE SPECIFIED		
FRACTIONS	±	1/64
DECIMALS	±	.01
DECIMALS	±	.005
HOLES	±	.002
ANGLES	±	½°

ALLIED LEISURE INDUSTRIES INC.
1700 W. 4TH AVENUE HIALEAH, FLORIDA 33010

NAME	HORIZ. & VERT. BALL MOTION			
MAT'LS		HEAT TREAT.		FINISH
DWN. GT.	APP D.	DATE 7-27-73	SCALE —	PART NO

- NET



-PADDLE BATTLE-

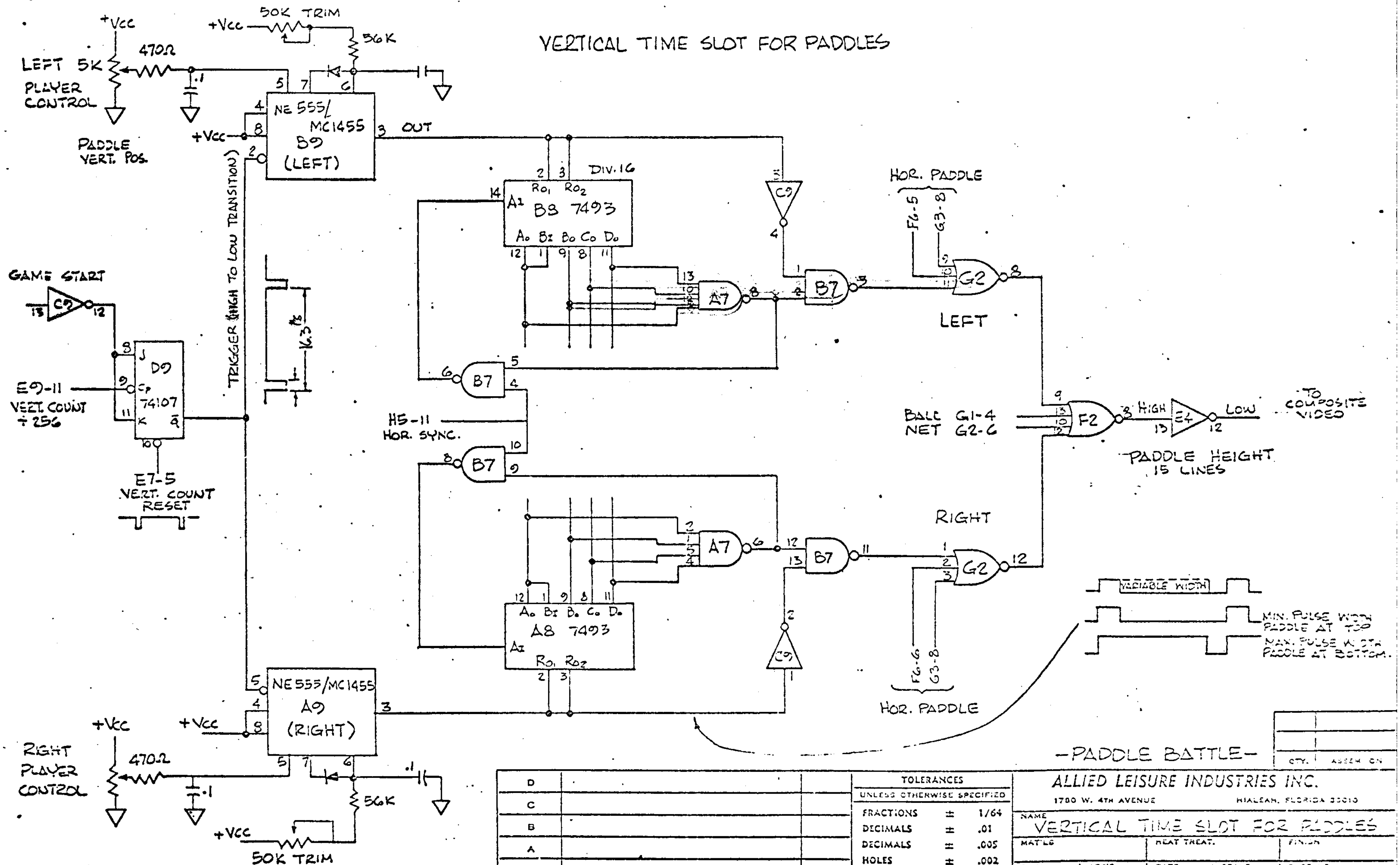
REVISION LETTER	REVISION	BY
D		
C		
B		
A		

TOLERANCES UNLESS OTHERWISE SPECIFIED		
FRACTIONS	±	1/64
DECIMALS	±	.01
DECIMALS	±	.005
HOLES	±	.002
ANGLES	±	½°

ALLIED LEISURE INDUSTRIES INC.
1780 W. 4TH AVENUE HIALEAH, FLORIDA 33010

NAME: NET
MAT'LS: | HEAT TREAT: | FINISH:
DWN.: G.T. | APP'D.: | DATE: 7-25-73 | SCALE: — | PART NO.:
QTY. | ASSEM. ON

VERTICAL TIME SLOT FOR PADDLES



-PADDLE BATTLE-

REVISION LETTER	REVISION	BY
D		
C		
B		
A		

TOLERANCES UNLESS OTHERWISE SPECIFIED		
FRACTIONS	±	1/64
DECIMALS	±	.01
DECIMALS	±	.005
HOLES	±	.002
ANGLES	±	½°

ALLIED LEISURE INDUSTRIES INC.
1700 W. 4TH AVENUE HIALEAH, FLORIDA 33010

NAME: VERTICAL TIME SLOT FOR PADDLES

MAT'LS | HEAT TREAT. | FINISH

DWN. G.T. | APP'D. | DATE 7-25-73 | SCALE — | PART NO.

QTY. | ASSEM ON

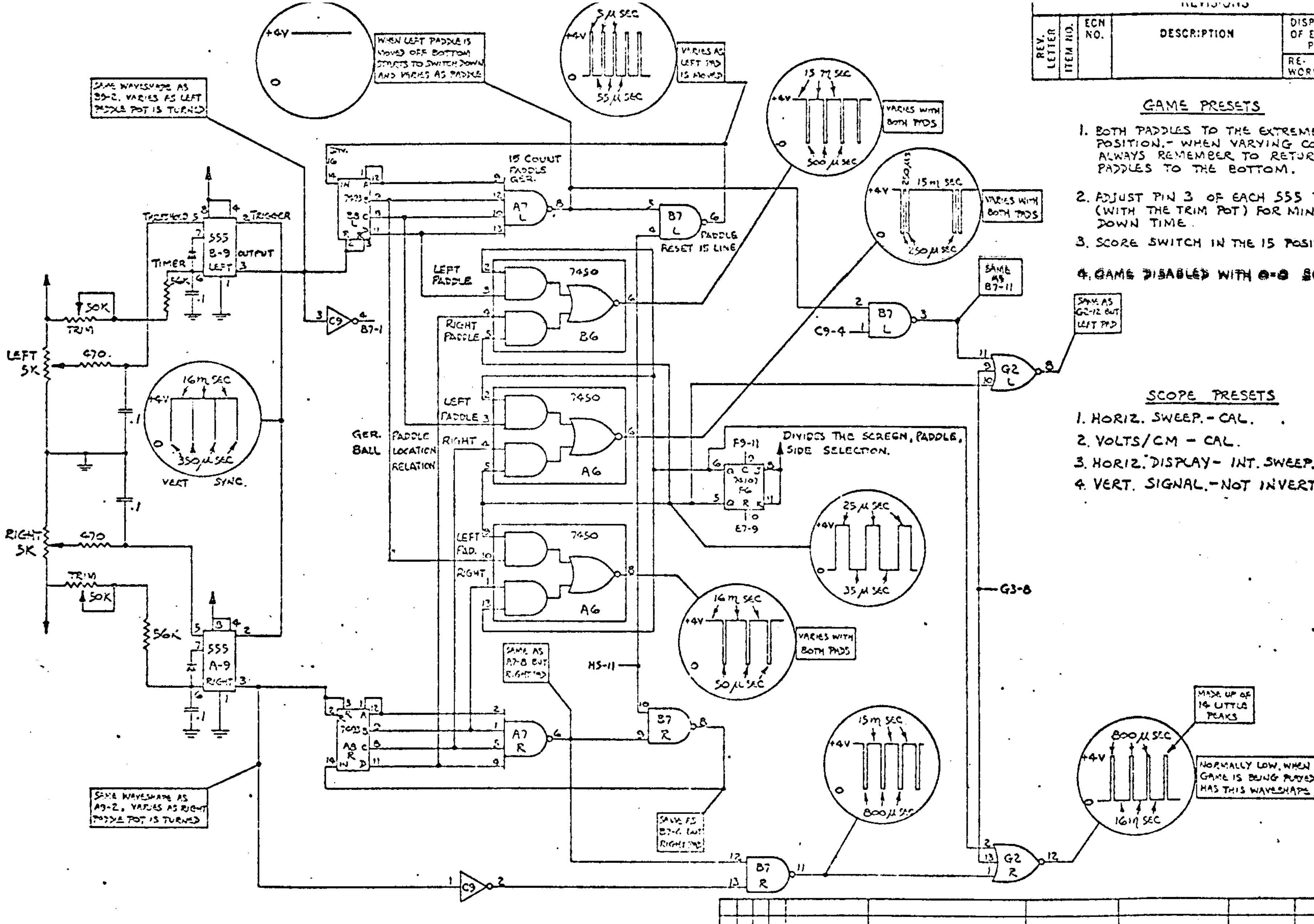
REV. LETTER	ITEM NO.	ECN NO.	DESCRIPTION	DISPOSITION OF EXISTING PARTS: RE-WORK	DISPOSITION OF EXISTING PARTS: SCRAP	ENGR'G	APP'D

GAME PRESETS

1. BOTH PADDLES TO THE EXTREME DOWN POSITION. - WHEN VARYING CONTROLS ALWAYS REMEMBER TO RETURN THE PADDLES TO THE BOTTOM.
2. ADJUST PIN 3 OF EACH 555 TIMER (WITH THE TRIM POT) FOR MINIMUM DOWN TIME.
3. SCORE SWITCH IN THE 15 POSITION.
4. GAME DISABLED WITH 0-0 SCORE.

SCOPE PRESETS

1. HORIZ. SWEEP. - CAL.
2. VOLTS/CM - CAL.
3. HORIZ. DISPLAY - INT. SWEEP.
4. VERT. SIGNAL. - NOT INVERTED.



QTY PER ASSY	DWG NO	NOMENCLATURE	MATERIAL OR COMM'L PART NO	STOCK SIZE	FINISH	PROCESS	HEAT TREAT

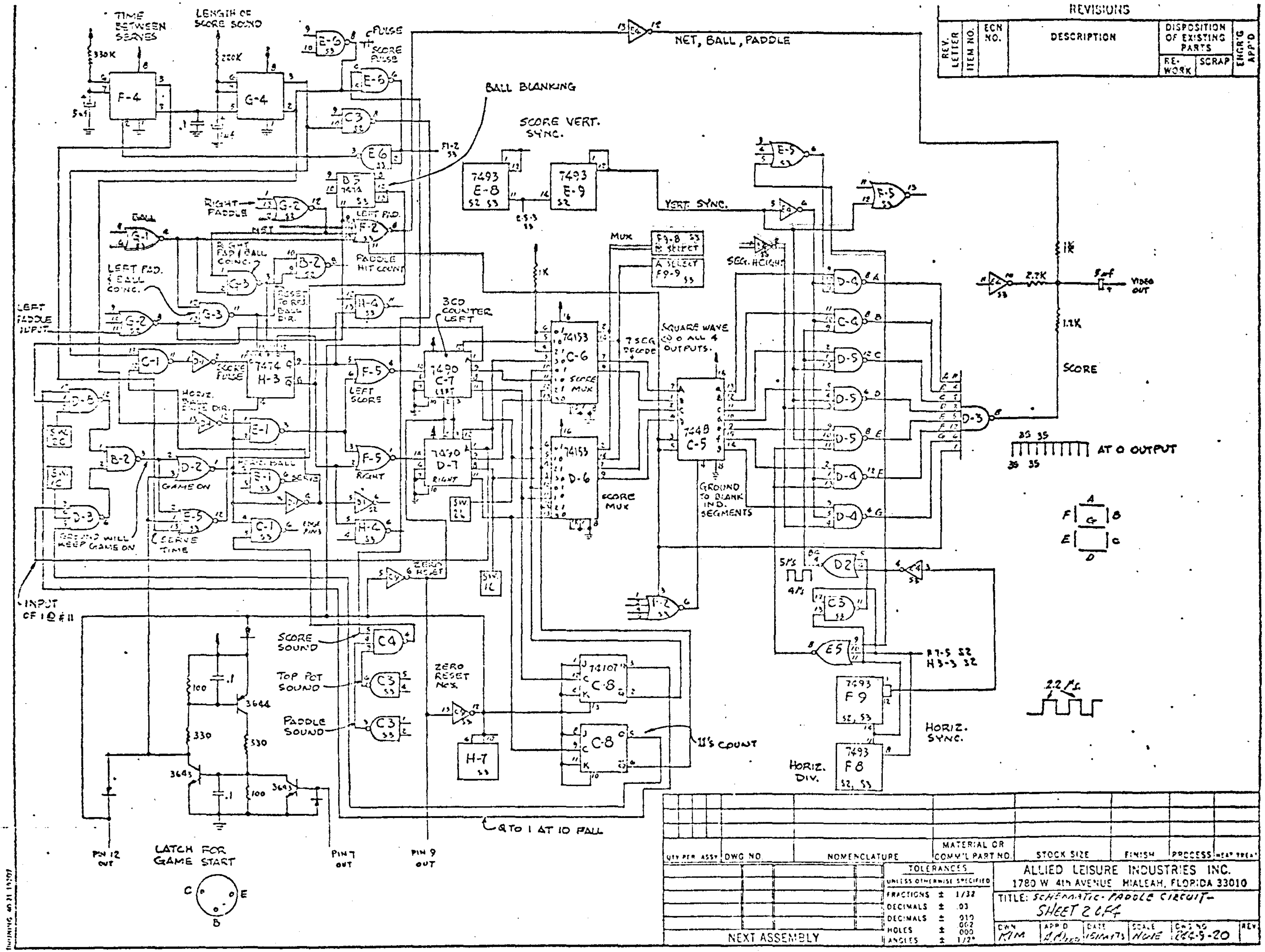
NEXT ASSEMBLY

TOLERANCES UNLESS OTHERWISE SPECIFIED: FRACTIONS ± 1/32; DECIMALS ± .03; DECIMALS ± .010; HOLES ± .002 .003; ANGLES ± 1/2°

ALLIED LEISURE INDUSTRIES INC.
1780 W. 4th AVENUE HIALEAH, FLORIDA 33010

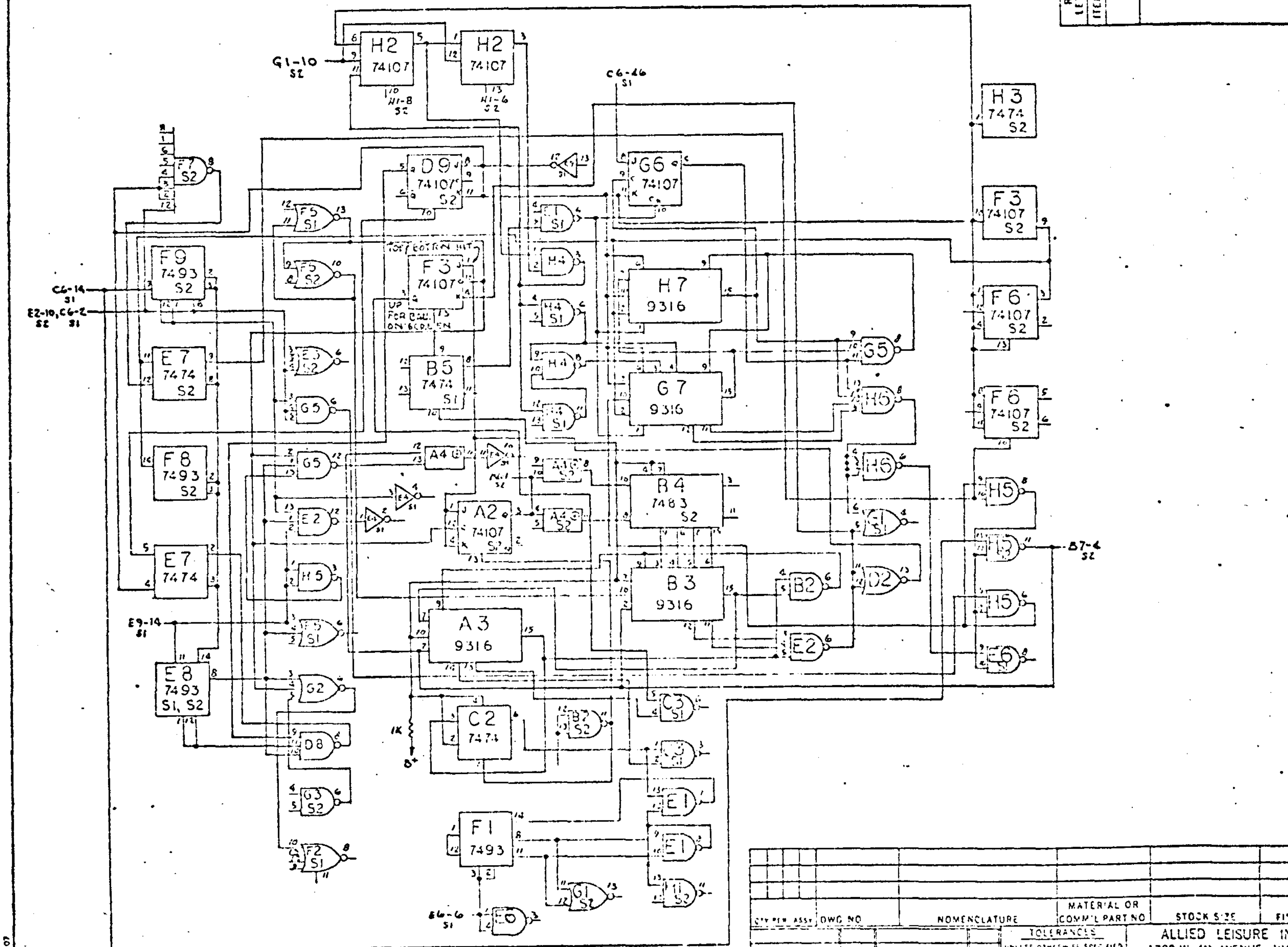
TITLE: PADDLE CIRCUIT — SHEET 1 OF 4

DWN	APP'D	DATE	SCALE	DWG NO	REV
A CHU	[illegible]	5/19/73	~	P1266-9-20	


REVISIONS
REV. LETTER
ITEM NO.
ECN NO.
DESCRIPTION
DISPOSITION OF EXISTING PARTS
RE-WORK
SCRAP
ENGR'G APP'D
TIME BETWEEN SERVES
LENGTH OF SCORE SOUND
330K
220K
F-4
G-4
PULSE
SCORE PULSE
NET, BALL, PADDLE
BALL BLANKING
SCORE VERT. SYNC.
7493 E-8
7493 E-9
VERT. SYNC.
RIGHT PADDLE
BALL
NET
LEFT PAD.
RIGHT PAD/BALL COINC.
PADDLE HIT COUNT
LEFT PAD. & BALL COINC.
LEFT PADDLE INPUT
RESET TO REV. BALL DIR.
BCD COUNTER LEFT
SCORE PULSE
7474 H-3
7490 C-7
LEFT SCORE
7490 D-7
RIGHT
HORIZ. BALL DIR.
HORIZ. BALL
GAME ON
SERVE
SERVE TIME
GROUND WILL KEEP GAME ON
END PINS
ZERO RESET
INPUT OF 10 & 11
MUX
F9-8 B SELECT
A SELECT F9-9
7 SEG DECODE
SQUARE WAVE TO 0 ALL 4 OUTPUTS.
74153 C-6
SCORE MUX
74153 D-6
SCORE MUX
7448 C-5
GROUND TO BLANK IND. SEGMENTS
SEG. HEIGHT
1K
2.2K
1.2K
VIDEO OUT
SCORE
AT 0 OUTPUT
A
B
C
D
E
F
G
SCORE SOUND
TOP POT SOUND
PADDLE SOUND
ZERO RESET NEX.
H-7
74107 C-8
C-8
11's COUNT
Q TO 1 AT 10 FALL
7493 F9
7493 F8
HORIZ. DIV.
HORIZ. SYNC.
2.2 µs
3644
3643
330
100
PIN 12 OUT
LATCH FOR GAME START
PIN 7 OUT
PIN 9 OUT
C
E
B
QTY PER ASSY
DWG NO.
NOMENCLATURE
MATERIAL OR COMM'L PART NO.
STOCK SIZE
FINISH
PROCESS
HEAT TREAT
TOLERANCES
UNLESS OTHERWISE SPECIFIED
FRACTIONS ± 1/32
DECIMALS ± .03
DECIMALS ± .010
HOLES ± .002 .000
ANGLES ± 1/2°
ALLIED LEISURE INDUSTRIES INC.
1780 W. 4th AVENUE HIALEAH, FLORIDA 33010
TITLE: SCHEMATIC - PADDLE CIRCUIT - SHEET 2 OF 4
DWN KIM
APP'D
DATE
SCALE NONE
DWG NO. 066-5-20
REV
NEXT ASSEMBLY

REV. LETTER	ITEM NO.	ECN NO.	DESCRIPTION	DISPOSITION OF EXISTING PARTS: RE-WORK	SCRAP	ENGR'G APP'D

REVISIONS



QTY PER ASSY	DWG NO	NOMENCLATURE	MATERIAL OR COMM'L PART NO	STOCK SIZE	FINISH	PROCESS

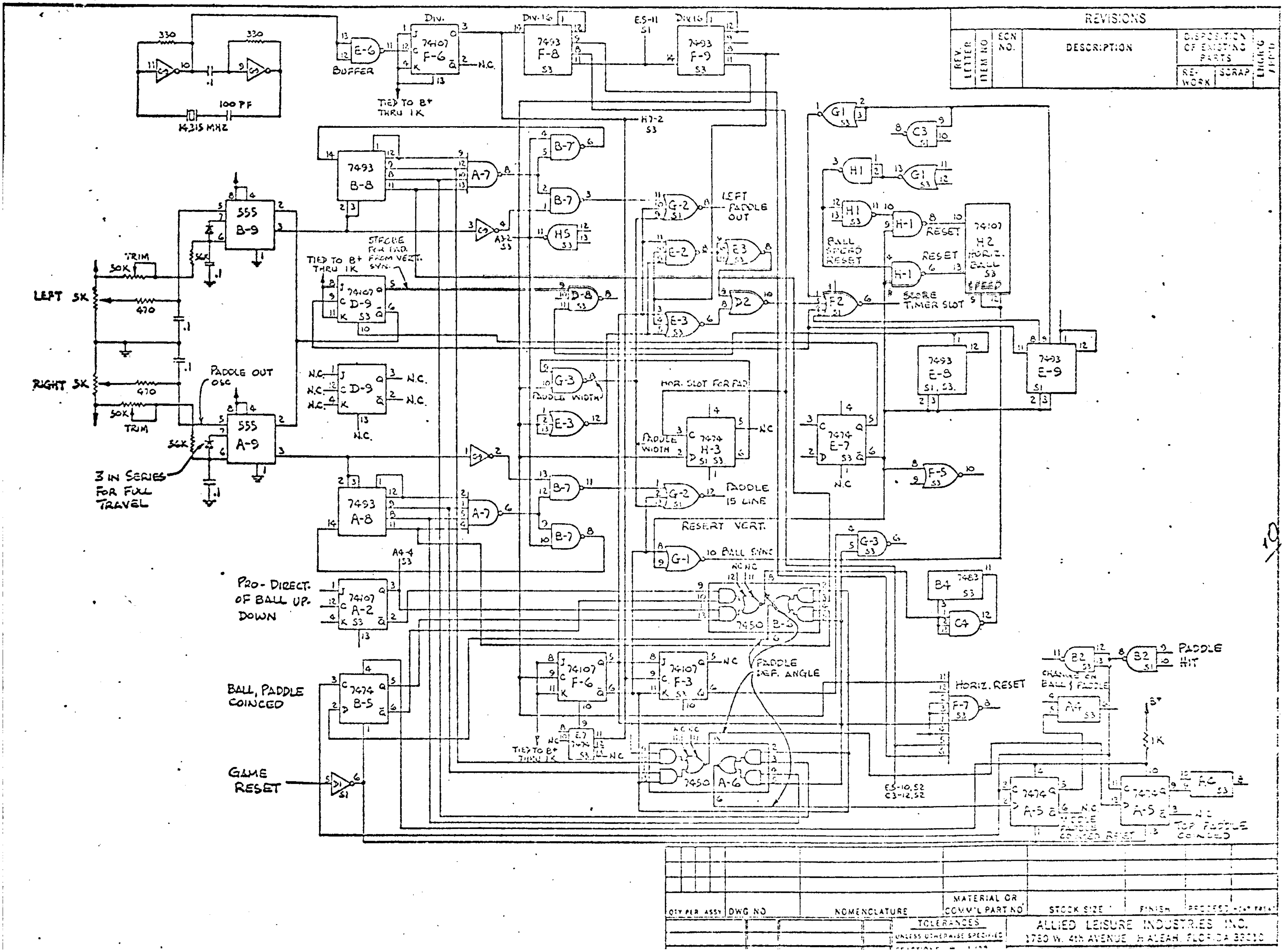
NEXT ASSEMBLY

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ± 1/32
DECIMALS ± .03
DECIMALS ± .010
HOLES ± .005
ANGLES ± 1/2°

ALLIED LEISURE INDUSTRIES INC.
1760 W. 4th AVENUE HIALEAH, FLORIDA 33010

TITLE: SCHEMATIC-PADDLE CIRCUIT
SHEET 3 OF 4

DWN	APP'D	DATE	SCALE	DWG NO	REV
E.M.	A.C.	[illegible]	NONE	224-9-201	


REVISIONS
REV. LETTER
ITEM NO.
ECN NO.
DESCRIPTION
DISPOSITION OF EXISTING PARTS
RE-WORK
SCRAP
330
100 PF
14.315 MHZ
BUFFER
DIV.
7493
7474
7474
7450
7483
555
B-9
A-9
TIED TO B+ THRU 1K
N.C.
LEFT 5K
RIGHT 5K
TRIM
50K
470
PADDLE OUT OSC
3 IN SERIES FOR FULL TRAVEL
STROBE FOR PAD. FROM VERT. SYN.
LEFT PADDLE OUT
BALL SPEED RESET
RESET
HORIZ. BALL SPEED
SCORE TIMER SLOT
PADDLE WIDTH
HOR. SLOT FOR PAD.
PADDLE 15 LINE
RESET VERT.
BALL SYNC
PRO-DIRECT. OF BALL UP. DOWN
BALL, PADDLE COINCED
GAME RESET
PADDLE REF. ANGLE
HORIZ. RESET
PADDLE HIT
CHANGE ON BALL & PADDLE
B+
1K
TOP PADDLE COINCED
QTY PER ASSY
DWG NO
NOMENCLATURE
MATERIAL OR COMM'L PART NO
STOCK SIZE
FINISH
TOLERANCES
UNLESS OTHERWISE SPECIFIED
ALLIED LEISURE INDUSTRIES INC.
1750 W. 4th AVENUE HIALEAH FLORIDA 33010